Replacement of the additional springs in the fin water tank valves LS10

1. Derig the glider and open both water ballast handles (aft position).
2. Remove the baggage compartment floors and holder 9R96 with additional battery or ELT if installed.
3. Measure the lengths x and y of excess steel cable coming out of both cable clamps (pos. 1), see figure 1.

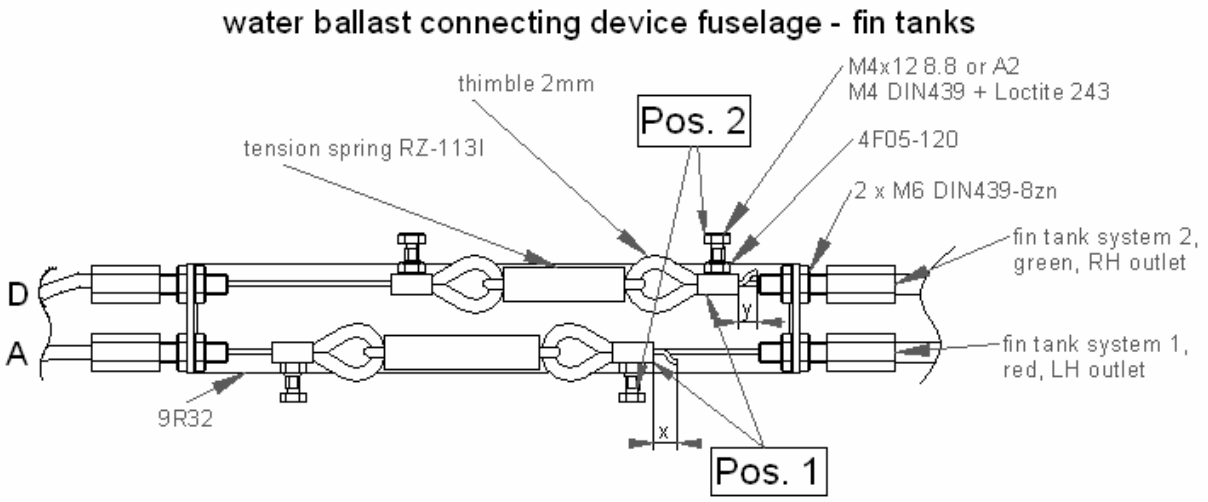


Figure 1, fin water tank valve drive connection below the baggage compartment floor

4. Loosen the M4 screws (pos 2.) of the cable clamps (pos. 1) on both steel cables going to the fin tanks. To lengthen the cable as far as possible pull the cable so far through the clamp that you can take the cable off the thimble. Adjust the clamp so that the clamp is close to the spring and the cable extends 1mm out of the clamp. Then tighten the clamp again.

Caution: Be careful that the steel cable doesn't slip out of the clamp. If the cable is lost in the guide tube, a new steel cable must be pulled in. This will be very time consuming!

5. Remove the rudder.

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Note: Steps 6 to 12 have to be performed for both valves:

6. Remove the hose clamp (pos. 4) and the piece of hose (pos. 3) from the valve fitting, see figure 2.
7. Unscrew the cap nut (pos. 6) and remove fitting (pos. 5), see figure 2.

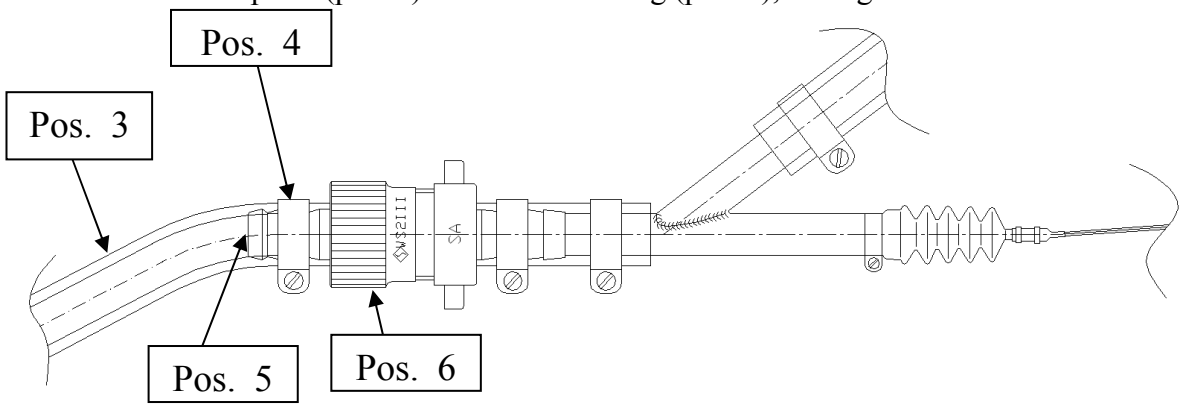


Figure 2, fin water tank valve assembly

8. Remove the rubber sealing ring (pos. 7) and the white plastic sealing ring (pos. 8) from the valve, see figure 3.
9. Now the white plastic part (pos. 10) and internal valve spring (pos. 9) can be pulled out as far as possible, see figure 3.

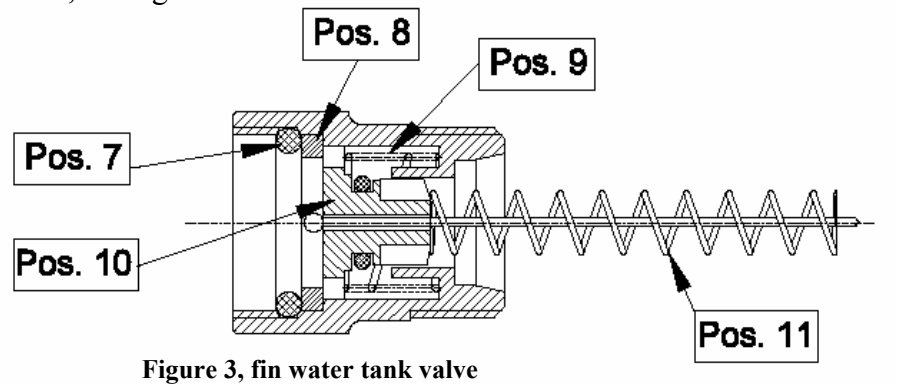


Figure 3, fin water tank valve

10. The zinc plated compression spring (pos. 11) can be removed by opening it with a screw driver and winding it off the steel cable.

Caution: Be careful not to damage the steel cable.

11. Open the replacement spring (VD164 Art. Nr. 45000699) (pos. 11) with a screwdriver and wind it over the cable.

Caution: Be careful not to damage the spring or the steel cable.

12. Reassemble the valve, reversing items 6 to 9.
13. Readjust the water ballast connection as marked, see item 3.
14. Check the system for water tightness and correct dump time (see MM section 1.8.5) and adjust if necessary according to MM section 4.4.1.
15. Reinstall the baggage compartment floors and holder 9R96 with additional battery or ELT.
16. Reinstall the rudder.

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